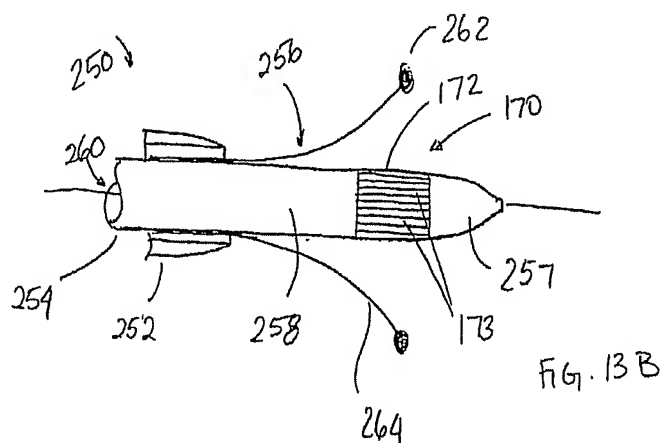


**REMARKS**

Claims 1 to 20 are currently pending in the present application. Claims 11-20 have been added. No new matter is added.

Claims 1-10 have been rejected under 35 U.S.C. 102(e) as being anticipated by U.S. 2003/0199767 to Cespedes et al. Claims 1-4 include the features of a data-processing unit that is arranged to sort a further local image of the vessel into the sequence that is stored in the memory, where the sorting is based on similarities between the further local image and one or more of the local images of the sequence. Claims 5-10 include the features of sorting a further local image, which is made by the sensor probe, into the sequence; and positioning a medical device coupled to the catheter based at least in part on the sorted further local image. Cespedes does not disclose or suggest these features of claims 1-10.

Cespedes is directed to a device that can identify and stabilize vulnerable plaque in a vessel. To accomplish this objective, and as relied upon by the Office Action, Cespedes utilizes a catheter body 258 having an ultrasound transducer 172 and a thermographer 256. The Cespedes device is shown as follows:



Cespedes utilizes both imaging data and temperature data to find vulnerable plaque in the vessel:

[0144] As seen in graph 282, as catheter 182 is proximally retracted across vulnerable plaque P, the temperature at the interior wall of vessel V along point Y rises from reference temperature  $T_0$  to local maximum temperature  $T_1$ . Temperature  $T_1$  is obtained at location  $x_1$  within vessel V. The temperature within the vessel recedes back to reference temperature  $T_0$  while catheter body 182 is further retracted from location  $x_1$  to proximal edge  $x_2$  of vulnerable plaque P. The increase in temperature from reference temperature  $T_0$  to temperature  $T_1$  in the region surrounding location  $x_1$  within the vessel may be as much as about 0.1°C. to over 2.0°C., and is typically at least 0.3°C. This range is provided only for the purpose of illustration and should in no way be construed as limiting.

[0145] The increase in temperature from  $T_0$  to  $T_1$  is indicative of vulnerable plaque susceptible to rupture. By comparing and correlating the thermographic data of graph 282 of FIG. 15B to IVUS image 280 of FIG. 15A, identification of vulnerable plaque P is corroborated and confirmed. Thus, providing both imaging and thermography simplifies vulnerable plaque identification while reducing a level of skill required on the part of a medical practitioner in order to properly diagnose such plaque. (Cespedes paragraphs 144-145).

Cespedes does not disclose or suggest the features of claims 1-4 of a data-processing unit that is arranged to sort a further local image of the vessel into the sequence that is stored in the memory, where the sorting is based on similarities between the further local image and one or more of the local images of the sequence. Cespedes also does not disclose or suggest the features of claims 5-10 of sorting a further local image, which is made by the sensor probe, into the sequence; and positioning a medical device coupled to the catheter based at least in part on the sorted further local image.

Claims 11 and 12 depend from claims 1 and 5, respectively, and are also allowable over Cespedes.

Claims 13-20 include the features of moving the sensor probe along the vessel and acquiring local images of the vessel at the point where the particular local image is made;

moving the medical device along the vessel and acquiring a further local image of the vessel at the point where the particular further local image is made; sorting the further local image into the sequence based on a similarity between the further local image and one or more of the local images of the sequence; and positioning the medical device coupled to the catheter based at least in part on the sorted further local image. As described above, Cespedes utilizes a combination of imaging and temperature measurement on a catheter body for the purpose of detecting vulnerable plaque and does not disclose these features of claims 13-20.

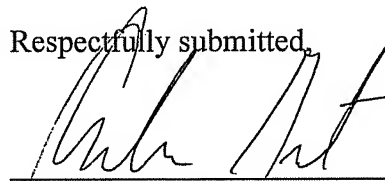
In view of the foregoing, Applicants respectfully submit that the specification, the drawings and all claims presented in this application are currently in condition for allowance. Accordingly, Applicants respectfully request favorable consideration and that this application be passed to allowance.

Should any changes to the claims and/or specification be deemed necessary to place the application in condition for allowance, the Examiner is respectfully requested to contact the undersigned to discuss the same.

Dated: \_\_\_\_\_

4/4/08

Respectfully submitted,



Andrew C. Gust  
Registration No. 47,620  
Akerman Senterfitt  
for David Barnes, Reg. No. 47,407  
Philips Electronics North America  
Corporation  
345 Scarborough Road  
Briarcliff Manor, New York 10510  
Telephone: 914-333-9693  
Facsimile: 914-332-0615  
File: DE 020294